

# THE ACTON MINE.

Three years have elapsed since the opening of the Acton Copper Mine, and probably few mines have in such a short time gained a greater or more merited celebrity. It has been my good fortune to be connected with it since September, 1861, in such a capacity as enabled me to gain much experience as to the nature and value of the deposits of copper ore, which are here the objects of mining enterprise. Had it not been for this circumstance I should not have ventured upon another description of the Acton Mine, seeing that so many valuable papers on the subject are already in our possession. As it is, the few observations which I have made, and which I now proceed to record, are only to be regarded as supplementary to former descriptions, especially to those of Sir W. E. Logan, and the Rev. A. F. Kemp; and as embracing a sketch of the progress of the mine from September, 1861, when Messrs. Davies and Dunkin, the proprietors, received the mine back from the lessees who had previously worked it, until the first of October, 1862, when the mine was purchased by the South Eastern Mining Company of Canada.

In the month of September, 1861, mining operations were being carried on in the following workings: Flowers's pit, Williams's pit, Harvey's pit, and No. 2 shaft. It is to be observed with regard to these names, that the word pit is applied to an open working of irregular and very considerable dimensions, while the name of shaft is given only to regular sinkings of the usual and smaller dimensions. The position of the above named workings, and the character of the rocks in which they occur, and by which they are bounded, will be seen from the accompanying map.

The whole of the open workings occur upon a bed of what has been called in former descriptions "copper limestone," the general strike of which is N.E. and S.W., with a dip more or less inclined to the N. W. Immediately underlying this cupriferous limestone, which is dolomitic, there occur from twenty to eighty feet of dark colored shales, in which, especially near the cupriferous limestone, copper pyrites is frequently found disseminated in thin strings and layers. Beneath this occurs another bed of limestone, of very considerable thickness, the outcrop of which forms the hill running along the south-east side of the mine. Between the cupriferous limestone and the underlying shale, there is often intruded a fine-grained greenstone, which sometimes forms very con-

A. Hill limestone. B. Underlying shale. C. Cupriferous limestone. D. Residual material. E. Greenstone. F. Flowers's Pit. G. Williams's Pit. H. Harvey's Pit. I. No. 2 shaft.

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